

Industrial Minerals Association – North America Climate VISION Work Plan

The Industrial Minerals Association - North America (IMA-NA) is a trade association created to advance the interests of North American companies that mine and/or process minerals used throughout the manufacturing and agricultural industries. Member companies produce ball clay, bentonite, borates, calcium carbonate, feldspar, industrial sand, mica, soda ash, talc, and wollastonite, as well as higher value-added products derived from these minerals.

In response to the President's challenge, IMA-NA's soda ash and borates company members¹ have set a goal to reduce overall greenhouse gas (GHG) emissions from fuel combustion per ton of product by 4.2% between 2000 and 2012. The companies included in IMA-NA's membership represent - in percentage of U.S. total production - some 80% of soda ash and 100% of borates. These companies have committed their support to the Administration's Climate VISION Program and will work to reduce aggressively their greenhouse gas intensity.

The four major areas of activities are:

- Emissions Measurement and Reporting
- Opportunities for Reduction of GHGs
- Cross-Sector Projects
- Research & Development and Technology Deployment

The specific actions that IMA-NA plans to undertake over the coming years under each of these areas are discussed in further detail in this work plan.

➤ Emission Measurement and Reporting

IMA-NA will strive to reduce GHGs wherever feasible and specifically to commit to reduce GHG intensity from energy utilization at our facilities. Specifically, we will perform the following tasks to measure and report our progress:

- A critical first step has been to develop and maintain a protocol document to assure that we generate complete,

¹ FMC Corporation, General Chemical Industrial Products, Inc. (including its Amherstburg, Ontario plant), Searles Valley Minerals, Solvay Chemicals, Rio Tinto Minerals

reliable and valid data; the IMA-NA Greenhouse Gas Inventory Protocol was designed to assure that the greenhouse gas inventory developed by this industry sector conforms to the guidelines outlined in "The Greenhouse Gas Protocol," published jointly by the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI). [completed].

- Our initial data collection spans a three year period from 2000 to 2002 [completed]; IMA-NA will submit to DOE data for years 2003-2005 in the 4th quarter of 2006; we will collect and report data for subsequent years on an annual basis through 2012.
- We will track our progress on reducing GHG Intensity and publish our performance on the public section of the IMA-NA Web Site.
- Beginning in 2007, we will provide annual reports on progress to the DOE (including any difficulties, special issues that are encountered, and suggestions on how the program might be improved).
- IMA-NA will work with the Department of Energy (DOE) to assure that the definitions and methodologies used under guidelines established under the Energy Information Administration's (EIA) Voluntary Reporting of Greenhouse Gases program to inventory emissions, determine reductions and account for sequestration activities are accurate and consistent.
- We will ensure that the IMA-NA GHG Inventory Protocol maintains consistency with the EIA Voluntary Reporting guidelines and encourage all the member companies of the IMA-NA to utilize the IMA-NA protocol.
- We will support efforts by the Administration to provide appropriate recognition to businesses and industries for voluntary actions to sequester, prevent or reduce GHG emissions.

➤ Opportunities for Reduction of Greenhouse Gases

Members of IMA-NA will seek opportunities to reduce or offset GHG emissions. Member activities will include the following tasks:

- We will identify, on a company by company basis, cost-effective methods of conserving energy and improvement of the energy efficiency of our processes, and seek to improve

on a continuous basis the efficiency of our energy and power generation systems.

- Members will seek assistance from and work with the DOE as appropriate to meet their objectives.
- Beginning in 2007, we will initiate planning to conduct sessions on energy conservation and GHG reduction at IMA-NA Workshops including, where appropriate, DOE participation.
- We will implement a program to recognize outstanding GHG reduction results among members, and in the 1st quarter of 2007, will describe the program to DOE.
- We will encourage IMA-NA member companies to conduct site-wide energy assessments, and promote conservation across the entire IMA-NA membership.
- In the 1st quarter of 2007, we will arrange to communicate to IMA-NA members relevant DOE Best Practices by means of a link on the IMA-NA website to these practices.
- In 2006 we will begin to publish energy and GHG updates in the IMA-NA Newsletter [completed].
- IMA-NA and its member companies will work to promote policies that encourage energy -efficient, low GHG technologies including combined heat and power systems (CHPs).
- IMA-NA will promote and support activities to further our industry's understanding of the benefits of GHG intensity reductions.
- We will encourage companies in the industrial minerals industry that are not IMA-NA members to participate in voluntary efforts, such as Climate Vision, or make their own commitments.
- We will seek innovative ways to offset energy-related emissions through sequestration or elimination of GHG releases not related to energy utilization.

➤ Cross-Sector Projects

As appropriate, IMA-NA will work with the DOE to promote the implementation within other industrial sectors of energy-saving technologies and practices developed by IMA-NA members. Some of the key activities will include:

- IMA-NA will seek cross-sector alliances and facilitate information-sharing with industries with similar GHG reduction challenges.

- IMA-NA will work with DOE as appropriate to develop credible methods to estimate GHG intensity improvements that result from the use of our products by our customers.
- We will foster awareness and encourage IMA-NA member companies to participate in the DOE's Regional Sequestration Partnerships program.

➤ Research & Development and Technology Deployment

IMA-NA will promote and support the further development and deployment of cost-effective technologies that will help reduce our GHG Intensity. Technologies that have been identified as providing potential benefits to our industrial sector include coal gasification, fuel cell technology, and renewable energy technologies (e.g. solar, wind and geothermal power), all of which provide potential means of reducing GHGs. In 2007, IMA-NA also will seek partnerships with universities to develop innovative technologies to reduce GHG emissions. IMA-NA has begun this process by contacting some 59 leading schools and universities to explore with them their possible membership in IMA-NA. The purpose of this effort is to further communication about technological innovation in industrial minerals, including energy conservation and reduction of GHGs.